

## **ABSTRACT**

A method and apparatus for calibrating a time-of-flight ranging or level measurement system coupled to a current loop. A first output current is generated and the level of the first output current is measured. If the level is within an acceptable range, the level of the first output current is assigned to an internal current setting. A second output current is generated and the level of the second output current is measured. If the level is within an acceptable range, then the level of the second output current is assigned to a second internal current setting. The first and second current settings are used to establish a range for controlling the current level in the current loop with the current level representing the process variable data, such as level measurement readings in a level measurement application.